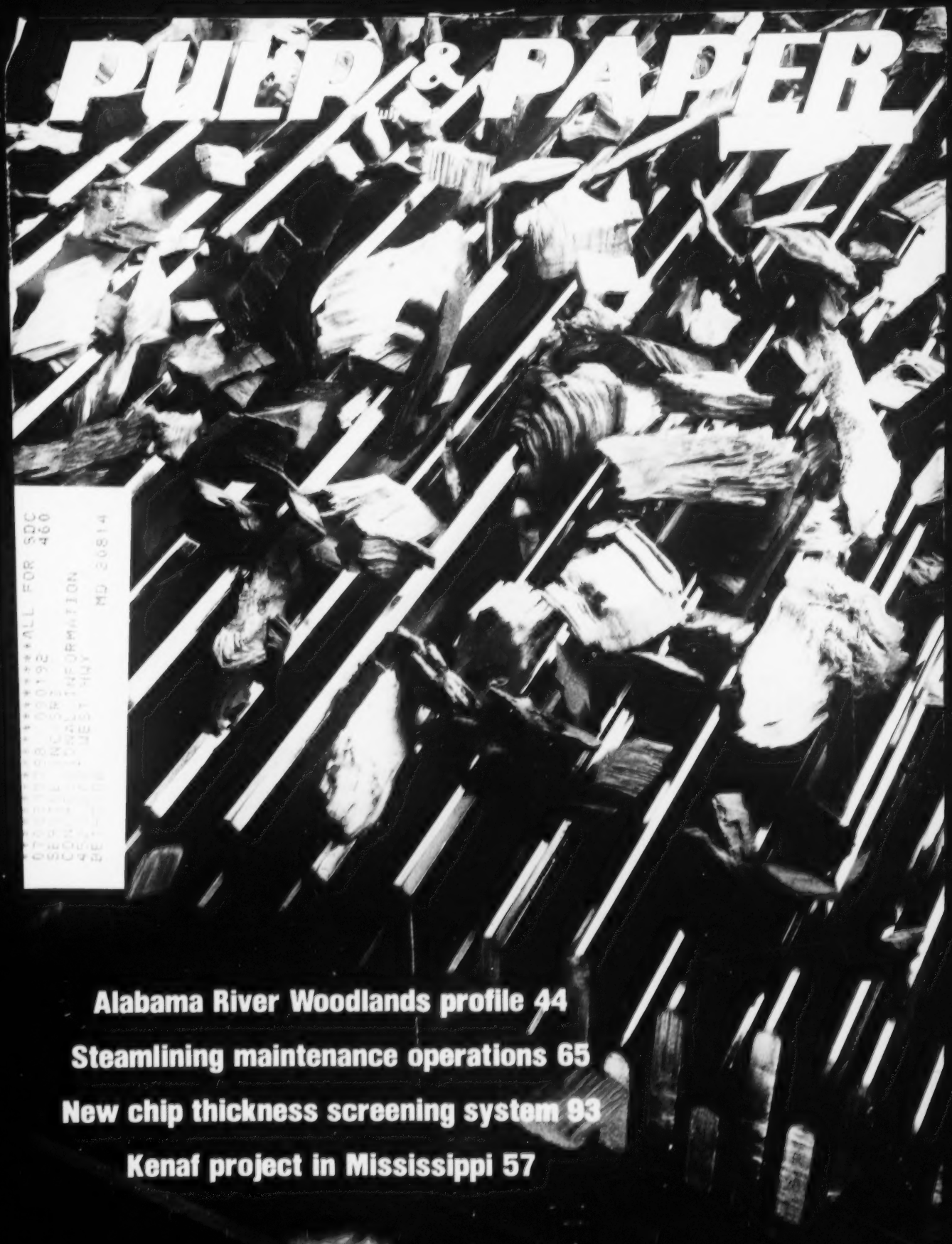
PULP & PAPER



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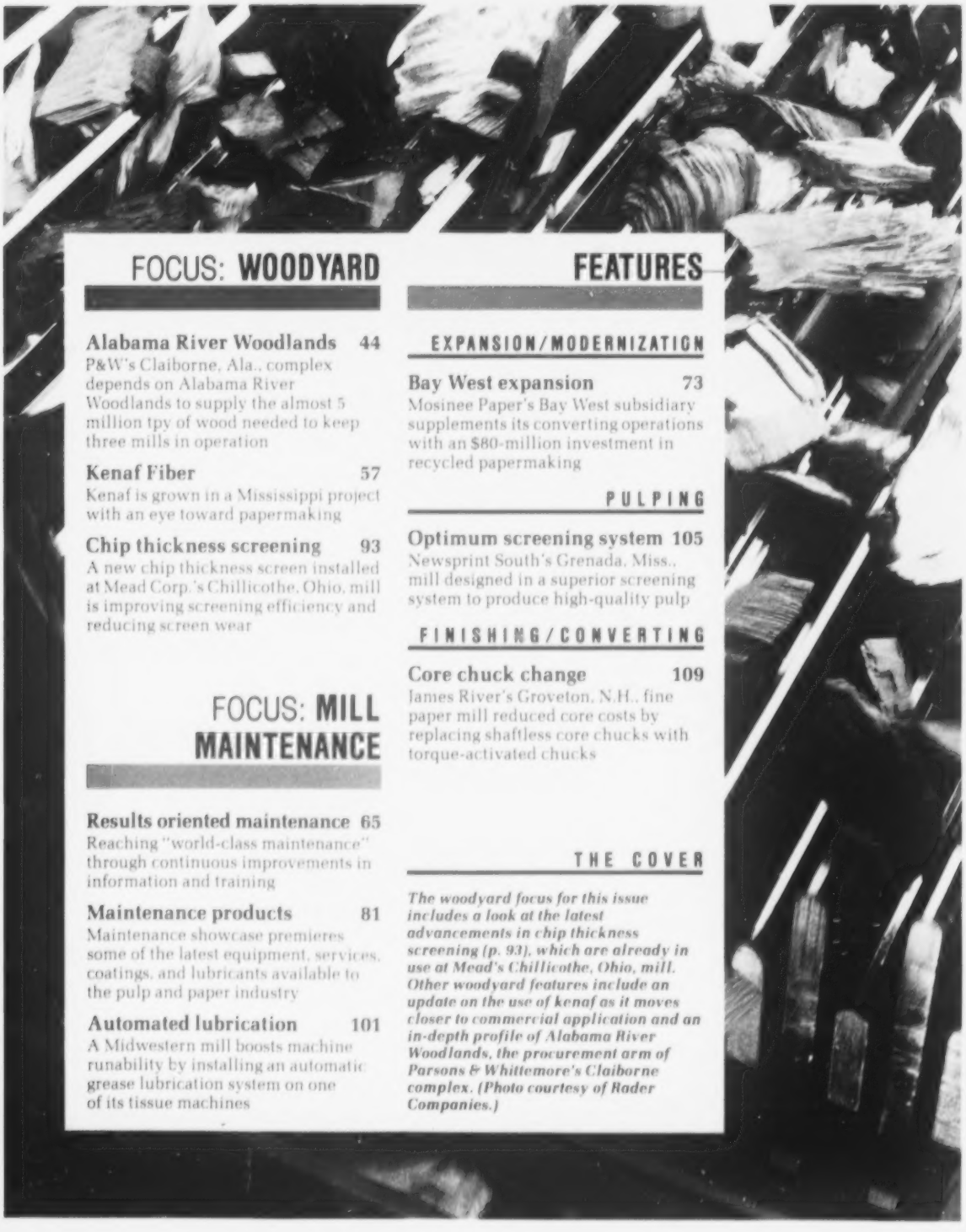

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The woodyard focus for this issue includes a look at the latest advancements in chip thickness screening (p. 93), which are already in use at Mead's Chillicothe, Ohio, mill. Other woodyard features include an update on the use of kenaf as it moves closer to commercial application and an in-depth profile of Alabama River Woodlands, the procurement arm of Parsons & Whittemore's Claiborne complex. (Photo courtesy of Rader Companies.)

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ABP

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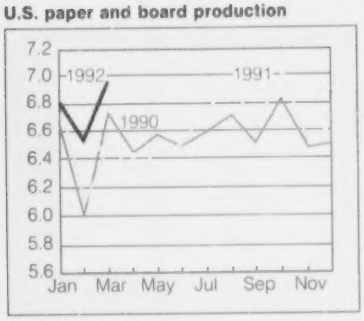
U.S. paper and board production



U.S. production of paper and paperboard totaled 7.0 million tons in March, up 6.1% from the same month last year, according to the American Paper Institute. Production in the first quarter was up 2.8% on a seasonally adjusted basis. Paperboard output in March matched the record December 1991 pace, leading to a gain of 4.2% for the quarter compared with the same period last year. Paper production posted a more modest 1.3% gain despite a 4.8% increase in newsprint output and strengthening in printing and writing demand.

Among major grades, printing and writing papers were up 2.5% for the first quarter, although 1% of the gain was due to an extra day for leap year. Uncoated free-sheet recorded the strongest performance, rising 6.4% through March. Containerboard production was up 6.3%, with a 7.3% increase in output for the domestic market offsetting a decrease of 0.6% in production for export.

Canadian newsprint shipments totaled 737,000 metric tons in March, down 0.8% from March 1991. Woodpulp shipments climbed 18.8% to 784,000 tons. Operating rates stood at 81% for newsprint mills, down from 87% a year earlier, and 90% for pulp mills, up from 83% in March 1991. ■

	Latest month (000 short tons)		% change from year ago	Annualized year-to-date (000 short tons)	% change from year ago
PAPER & PAPERBOARD PRODUCTION[1]					
Newsprint	Mar.	586	1.7	7,017	4.8
Uncoated groundwood (s)	Mar.	133	-10.1	1,506	-14.3
Coated paper (s)	Mar.	608	3.4	7,243	1.4
Uncoated free-sheet (s)	Mar.	993	10.2	11,674	6.4
Other printing/writing	Mar.	133	-2.9	1,468	-5.2
Total packaging and other paper (s)	Mar.	404	4.4	4,743	1.8
Tissue	Mar.	502	-0.6	5,789	-0.2
Total paper	**Mar.**	**3,358**	**3.5**	**39,441**	**2.4**
Unbleached kraft paperboard	Mar.	1,889	11.1	22,007	6.7
Semichemical medium	Mar.	490	4.5	5,895	3.8
Bleached paperboard	Mar.	400	2.6	4,476	-1.7
Recycled paperboard	Mar.	833	8.6	9,590	5.9
Total paperboard	**Mar.**	**3,612**	**8.6**	**41,987**	**5.4**
Total U.S. paper and paperboard output	**Mar.**	**6,970**	**6.1**	**81,408**	**3.9**
PULP, WASTEPAPER & FIBER[2]					
Total U.S. woodpulp production	Mar.	5,525	3.9	65,844	3.2
Market pulp production	Mar.	863	16.2	10,119	12.1
Wastepaper consumption at paper/board mills	Mar.	2,110	16.2	24,206	10.1
Pulpwood consumption (cords)	Feb.	8,626	6.3	103,612	-2.0
CONVERTED PRODUCTS STATISTICS[3]					
Corrugated box shipments (billion ft²)	Mar.	27.730	13.2	82.151[6]	8.0
Containerboard inventories at U.S. box plants and mills	Feb. 28	3,033	-1.3		
INTERNATIONAL TRADE[2]					
U.S. paper imports (including products)	Feb.	933	-7.4	11,214	-11.5
Imports of Canadian newsprint	Feb.	542	-15.0	6,496[6]	-18.7
U.S. paper exports (including products)	Feb.	494	-23.2	8,698	11.1
Exports of unbleached kraft linerboard	Feb.	246	1.2	3,083	4.1
Exports of woodpulp	Mar.	576	-4.0	6,918	10.8
Norscan pulp inventories[4]	Mar. 31	1,227	-23.5		
Norscan pulp operating rates[4]	Mar.	95%	94%	97%	95%
CANADIAN STATISTICS[5] *(reported in metric tons)*					
Total newsprint shipments	Mar.	737	-0.8	2,793[6]	-5.5
Operating rates	Mar.	81%	87%	81%	92%
Inventories held by U.S. consumers	Mar. 31	n.a.			
Other paper/board shipments	Mar.	645	5.6	2,556	6.9
Woodpulp shipments (export only)	Mar.	784	18.8	3,127	13.2
Operating rates	Mar.	90%	83%	91%	91%

1. American Paper Institute. 2. API, Bureau of Census, American Pulpwood Assn. 3. Fibre Box Assn., Paperboard Packaging Council. 4. North American/Scandinavian paper-grade market pulp. 5. Canadian Pulp & Paper Assn. 6. Not annualized. (s) = Shipments.

Bleached paperboard: Mill operating rates are improving after a turbulent business cycle

Grade structure: Solid bleached sulfate (SBS) paperboard is used primarily for folding carton and milk carton packaging. SBS is a premium paperboard grade produced from a furnish containing at least 80% virgin-bleached woodpulp. It is intended for applications that require superior folding, scoring, and printing characteristics. It is also used for cups and plates, food containers, and preprint linerboard used in display packaging. Most SBS is clay-coated for printing applications and may also be polyethylene-coated for food packaging. Basis weights vary from 40 to 100 lb/1,000 ft^2, and calipers range from 12 to 28 pt.

Markets: Industry capacity for bleached paperboard is distributed as follows: folding boxboard, 49.3%; milk carton and food service, 41.2%; linerboard, 3.6%; and other packaging, 5.9%. These figures represent the 1992 capacity allocations published by the American Paper Institute.

Production/capacity: Bleached paperboard output increased by 3.9% to 4.572 million short tons in 1991 as a result of an expansion in industry capacity. However, market conditions weakened toward the end of the year, and demand dropped considerably. Despite the upward trend in industry production, actual consumption probably declined slightly during the year. Domestic demand remained weak in January and February, so a considerable inventory surplus accumulated at paper mills.

During 1991, the bleached paperboard industry added 180,000 tons of new capacity, representing a gain of 3.8% to 4.886 million tons. This year, mills will add an additional 81,000 tons of capacity to raise the industry capacity base to 4.967 million tons. Capacity will remain at approximately this level until late 1993, when Westvaco Corp. is scheduled to bring online a new paper machine with capacity of 350,000 tons/year.

Several mills that produce SBS packaging board also manufacture lightweight bleached bristols used by commercial printers for paperback book covers, telephone directories, greeting cards, menus, postcards, etc. In 1991, bleached bristol production declined by 2.5% to 1.123 million tons. Bleached bristols are not included in the bleached packaging board capacity and production figures shown here.

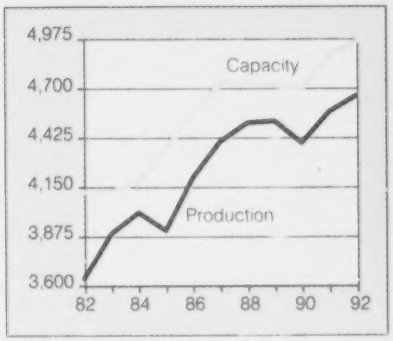
Outlook: Bleached paperboard markets showed renewed strength in May and June of 1992 and mill backlogs improved steadily through midyear. Production of folding carton grades bounced back after dropping to a seven-year low point in February, but total production during the first half of the year remained about 6% below production levels for the same period in 1991. Production of milk carton stock for domestic plants also remained lower due to excess inventory early in the year, but exports were up about 10%.

Most of the excess inventory of bleached paperboard was removed by midyear, therefore setting the scene for a recovery to more stable market conditions. Exports will lead the recovery, but due to the continued weakness in the U.S. economy, total bleached paperboard production is forecast to increase only 2% above the 1991 level this year. Since SBS capacity will increase about 1.5% this year, supply and demand should be fairly balanced.

Prices: Bleached paperboard prices were under considerable pressure during the past year. This resulted in widespread price discounting in a number of grades including uncoated plate and cup stock and some of the commodity folding carton grades. Although nominal list prices of lightweight folding carton grades increased about $40/ton to $870 in mid-1991, transaction prices for many customers were closer to $800-$830/ton, with some low-end business down at $750-$780/ton. Current prices have now stabilized and most transactions are at the $800-$850 level. Even among the lower quality grades, prices are up from the depressed $750-$760 level of a year ago.

Historical prices for solid bleached, clay-coated 15-pt folding carton boxboard (rolls, $/short ton, year-end prices): 1980, $550; 1981, $625; 1982, $590/625; 1983, $590/625; 1984, $590/665; 1985, $500/590; 1986, $580/590; 1987, $635; 1988, $730; 1989, $830; 1990, $830; 1991, $800. ■

SUPPLY/DEMAND (000 tons)



FORECAST (000 tons)

U.S.	1990	1991	1992
Production[1]	4,399	4,572	4,663e
Capacity[1]	4,706	4,886	4,967
Utilization rate	93.5%	93.6%	93.9%
Imports	40	30	30
Exports	732	743	790
Apparent U.S. consumption	3,707	3,859	3,903
lb/capita	29.7	30.5	30.6
GNP ratio[2]	0.89	0.93	0.93

1. American Paper Institute production, capacity data. 2. 1,000 tons/$ billion real GNP. e = *Pulp & Paper* estimate.

TOP U.S. PRODUCERS (000 tpy)

	Annual capacity (000 tons)	Market share (%)
1. International Paper	970	19.5
2. Federal Paper Board	680	13.7
3. Westvaco	620	12.5
4. Potlatch	554	11.2
5. Georgia-Pacific	370	7.5
6. Temple-Inland	300	6.0
7. James River	270	5.4
8. Champion International	265	5.3
9. Gulf States Paper	230	4.6
10. Weyerhaeuser	230	4.6
11. Gilman Paper	200	4.0
12. Jefferson-Smurfit/CCA	185	3.7
13. Union Camp[1]	140	n.a.

Market share of top five companies:
64.4%

Market share of top ten companies:
90.3%

Total U.S. capacity (1992):
4.967 million short tons

1. Includes more than 50% board/bristol swing capacity. n.a. = not available.

also said the company's 440,000-tpy Lufkin, Texas, mill is using a "direct entry" method of recycling, producing a low-content recycled sheet without the deinking process.

Sheldon will begin collecting and building up storage of wastepaper in the fall. Curbside collection in Houston now produces 500 tons/month, involving about 48,000 homes, with plans to add 60,000 more homes this year. The Sheldon mill, located about 20 minutes from downtown Houston, will consume approximately 500 tons/day of ONP and old magazines, and the company said it hopes to collect the remaining one-third of its needs from elsewhere in Texas, boosting the state's total recyclable recovery rate from 17% to 30%. The mill will divert some of the flow of Texas wastepaper to recycled paper/board mills in Monterrey and San Luis Potosi, Mexico. ■

SALES AND EARNINGS

Canadian industry losses narrowed

Canadian paper industry results.

	First-quarter 1992 (C$000)			
	Sales 1992	% change 1992/91	Earnings 1992	Earnings 1991
Abitibi-Price Inc.	$650,000	−10.5%	($41,600)	($5,500)
Canadian Pacific Forest Products Ltd.[1]	429,700	(12.0)	(71,100)	(52,500)
Canfor Corp.[1]	215,700	1.0	(10,900)	(16,500)
Cascades Inc.[1]	213,391	(2.0)	5,419	5,571
Crestbrook Forest Industries Ltd.	38,981	3.4	(2,527)	(2,483)
Doman Industries Ltd.[1]	121,700	(1.1)	(6,800)	(10,100)
Domtar Inc.	450,000	0.0	(46,000)	(28,000)
Donohue Inc.[1]	113,763	(13.3)	(8,300)	2,331
Fletcher Challenge Canada Ltd.	229,800	(13.8)	(24,300)	(10,700)
MacMillan Bloedel Ltd.	718,500	6.0	(11,000)	3,800
Noranda Forest Inc.	1,051,000	2.0	(24,000)	(38,000)
Repap Enterprises Corp.	278,300	1.5	(44,600)	(17,500)
Rolland Inc.	68,200	(19.5)	(2,023)	313
Scott Paper Ltd.	98,212	(16.9)	1,375	4,696
Slocan Forest Products Ltd.	56,727	42.0	83	(4,116)
Tembec Inc.[1]	82,249	38.4	(8,850)	417
Weldwood of Canada Ltd.	180,400	13.5	1,500	(7,500)
West Fraser Timber Co.	154,000	51.9	2,000	(8,200)
Totals[2]	**$4,432,123**	**−2.0%**	**($286,123)**	**($185,871)**

1. 1992 earnings exclude major nonrecurring items.
2. Totals. Noranda Forest accounts for MacMillan Bloedel, in which it has roughly a 50% stake, as a consolidated subsidiary. Accordingly, to avoid double counting, MB's sales and half of its earnings are excluded from the totals line.
( ) = losses.

The prolonged slide in the Canadian forest products industry's profits appeared to be at least leveling off in the first three months of 1992, as strength in the wood products sector, benefits from restructuring efforts, and a weakening Canadian dollar offset a continued slump in most paper grades, particularly newsprint. A *Pulp & Paper Week* survey of 18 companies showed a net loss of C$286.1 million, excluding nonrecurring items, on sales of $4.4 billion for the quarter ending Mar. 31, 1992. Though down relative to a $185.9-million deficit posted in the same period a year earlier, the loss tally was less severe than those reported for the third and fourth quarters of 1991, $324 million and $419 million, respectively.

Wood products especially were showing signs of recovery in the first quarter. Bolstered by strong markets for lumber products and improved pricing for pulp, Weldwood of Canada Ltd., West Fraser Timber Co. Ltd., and Slocan Forest Products Ltd. all managed to return to the black.

However, demand from offshore lumber markets remains weak, particularly in Japan. And of potentially even greater concern, Canadian producers may suffer an erosion in their competitive position unless a preliminary ruling by the U.S. Dept. of Commerce is overturned in the near future; the ruling imposed a 14.48% countervailing duty on all Canadian lumber imported into the U.S., effective early March.

Despite the upturn in the lumber markets, both Fletcher Challenge Canada Ltd. and MacMillan Bloedel Ltd. in British Columbia fell well shy of break-even. After suffering a steep $24.4-million first-quarter loss, FC announced plans to issue almost $250 million in additional equity, 71.6% of which is to be purchased by its parent company, Fletcher Challenge Ltd. of New Zealand.

Proceeds will be used to repay debt. The company has agreed to sell its Crown Packaging corrugated container business to United Packaging Ltd. of Richmond, B.C., which will also purchase Crown's 50% interest in Commencement Bay Corrugated Inc. near Tacoma, Wash.

MB reported a net loss of $11 million for the first three months of 1992, compared with a $36.4-million loss in fourth-quarter 1991 and a $3.8-million gain in first-quarter 1991. MB noted that equity earnings declined mainly because Dutch papermaker KNP, of which MacMillan Bloedel owns a 31% equity interest, is experiencing weaker paper markets in Europe. MB's management doesn't expect a significant improvement in pulp or newsprint until sometime in 1993.

Toronto, Ont.-based Abitibi-Price Inc.'s $41.6-million first-quarter loss can be largely tied to low prices and significant downtime at its newsprint operations. The newsprint segment's sales tumbled 25% to $184 million, while its quarterly operating loss exceeded $33 million compared with a $2.2-million loss a year earlier. Profits may remain under considerable pressure in light of faltering prospects for a 5% reduction in newsprint discounts, which certain companies, not including Abitibi, had announced for summer.

Results at Canadian Pacific Forest Products Ltd. of Montreal were even worse as lower newsprint pricing and shipment volumes overwhelmed relief from improved lumber prices. ■